

### REMARKS

Initially, Applicant would like to thank the Examiner for the finding of allowable subject matter in Claims 3-4 and 23-28.

Claims 1 and 4-29 are now pending in the application. Claim 1 has been amended to incorporate the features of allowable Claim 3. Claims 2 and 3 have been cancelled in view of the amendment to Claim 1. Claim 4 has also been amended to now depend upon amended Claim 1. Claims 17, 19, and 22 have also been amended to each recite, in part, a sampling step that comprises drawing a sidestream using an in-situ eductor with a sample inlet and an in-situ critical orifice on the sample inlet wherein the sample enters a sampling system through the critical orifice, a feature of allowable Claim 3 which the Examiner has acknowledged is not disclosed in the art of record. New Claim 29 has been added to depend from Claim 1 and to recite the feature that the in-situ sampling of a) is performed at a temperature above ambient conditions. Support for this new claim can be found, for example, on page 12, lines 9-23, of the specification and in the examples described beginning on page 14, line 3 of the specification.

An amended Abstract, which does not exceed 150 words and which is in the form of a single paragraph, has also been submitted herewith. Support for the amended Abstract can be found in the Abstract and Specification as originally filed.

No new matter has been introduced by these amendments.

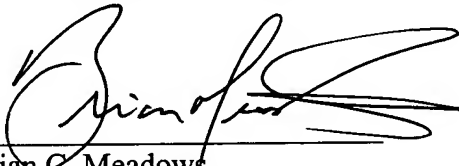
In the instant rejection, Claims 1-2 and 5-22 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious and unpatentable over the combined disclosures of Dec, J.E. , Zur Loye, A.O., and Siebers, D.L., "Soot distribution in a D.I. Diesel Engine Using 2-D Laser Induced Incandescence Imaging," *SAE Transactions*, 100, pp. 277-288 (1991) in view of U.S. Patent No. 5,109,708 to Lawless *et al.* and Snelling, D.R., Smallwood, G.J., Gülder, Ö.L., Liu, F., and Bachalo, W.D., "A Calibration-Independent Technique of Measuring Soot by Laser-Induced Incandescence Using Absolute Light Intensity," The Second Joint Meeting of the U.S. Sections of the Combustion Institute, Oakland, California, March 25-28 (2001). While Applicant does

not concede or agree with these rejections, Claim 1 has been amended to incorporate the features of allowable claim 3 in order to facilitate prosecution and to place the application in condition for allowance. Likewise, independent Claims 17, 19 and 22 have also been amended to recite, in part, drawing a sidestream using an in-situ eductor with a sample inlet and an in-situ critical orifice on the sample inlet wherein the sample enters a sampling system through the critical orifice. Accordingly, Applicant believes the foregoing amendments place all of pending Claims 1 and 4-29 in condition for allowance and therefore respectfully seeks notification of same

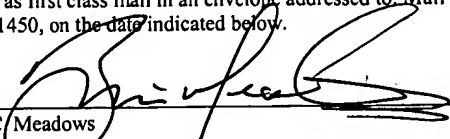
No fee is believed due; however, the Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-0629.

Respectfully submitted,

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<b><u>CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8</u></b>	
I hereby certify that this correspondence, including any items indicated as attached or included, is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below.	
 _____ Brian C. Meadows	<u>6-23-2006</u> Date